Viega Smart Loop™ Internal Recirculation Kit
Model 2976.1ZL - Zero Lead*

Description
Stagnant water can harbor dangerous pathogens in domestic water distribution systems. Reducing stagnation helps to maintain design temperature and residual disinfectant levels both of which reduce the propagation of waterborne pathogens, leading to a safer domestic water distribution system.

The Viega Smart Loop recirculation system utilizes an internal recirculation line, eliminating heat loss associated with the return line of a conventional recirculation system. With Viega Smart Loop, the installation of a separate return pipe is eliminated. The internal recirculation system saves time, material, space and energy.

Materials
• Zero lead bronze
• 316 stainless steel
• ⅜" PEX tubing**

Features and Benefits
• Smart Connect™ technology
• For use with Viega ProPress® systems
• Eliminates return pipe core drilling
• Eliminates return pipe fire caulking
• Eliminates return pipe insulation
• Requires fewer fittings and supports
• Reduces heat loss on return pipe
• Saves time on installation

Marking and Certification
• NSF-61 Annex G
• ASTM F877

Specifications
• System maximum operating temperature and pressure: 140°F @ 120 psi
• Total circulation length shall not exceed 325' 

*Zero Lead identifies Viega products meeting the lead free requirements of NSF 61-G through testing under NSF/ANSI 372 (0.25% or less maximum weighted average lead content).

Pressure Drop vs. Flow Rate
1" & 1-¼" Type L Copper Pipe with ⅜" PEX Internal Recirculation System
1-½" & 2" Type L Copper Pipe with ⅜" PEX Internal Recirculation System
System Comparison
20% – 30% Energy Conservation by Reducing Heat Loss

Conventional Circulation
Length of Pipe = 262 ft.
Heat Loss = 1703 Btu/hr.

Internal Recirculation System
Length of Pipe = 262 ft.
Heat Loss = 1211 Btu/hr.

Viega products are designed to be installed by licensed and trained plumbing and mechanical professionals who are familiar with Viega products and their installation. Installation by non-professionals may void Viega LLC’s warranty.

This document is subject to updates. For the most current Viega technical literature please visit www.viega.us.